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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/656,995	09/07/2000	Takao Miyazaki	0378-0374P	2239

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EXAMINER
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NGUYEN, LUONG TRUNG

ART UNIT	PAPER NUMBER
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2622

MAIL DATE	DELIVERY MODE
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06/15/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/656,995	<b>Applicant(s)</b> MIYAZAKI, TAKAO	
	<b>Examiner</b> LUONG T. NGUYEN	<b>Art Unit</b> 2622	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 March 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20-39 is/are pending in the application.
- 4a) Of the above claim(s) 32-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-31 is/are rejected.
- 7) ☒ Claim(s) 38-39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election of Species I (Figure 1) in the reply filed on 7/15/2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 32-37 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/15/2004.

### *Response to Arguments*

3. Applicant's arguments, see Amendment, filed on 3/22/2007, with respect to the rejection(s) of claim(s) 20-31 under 35 U.S.C. 103(a) as being unpatentable over Yumoto et al. (US 6,734,910) in view of Taniguchi et al. (US 6,549,232) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Yumoto et al. and Taniguchi et al. in view of Yamagishi (US 2002/0057352).

### *Claim Objections*

4. Claim 31 is objected to because of the following informalities:

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Noted that claim 20 amended with the limitation "wherein said controller sets a period of time corresponding to a photometric value as the preselected intervals," which is the limitation of claim 31 which depends on claim 20; therefore, claim 31 should be canceled.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 20-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yumoto et al. (US 6,734,910) in view of Taniguchi et al. (US 6,549,232) further in view of Yamagishi (US 2002/0057352).

Regarding claim 20, 31, Yumoto et al. discloses an image pickup apparatus comprising:  
an image sensor (CCD included in signal converting section 12, Figure 1, Column 3, Lines 40-43) for picking up a scene in response to a control signal to thereby output an image signal representative of the scene;

a recording device (DRAM 14, Figure 1, Column 3, Lines 45-65) for recording a plurality of frames of image signals;

a selecting device (13, Figure 1, Column 3, Lines 45-65) for allowing an operator of the image pickup apparatus to select a desired one of the plurality of frames of image signals recorded in the recording device;

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a controller (control section 20, Figure 1, Column 4, Lines 7-20) operative in response to the selecting device for outputting the control signal to cause the image sensor to pick up the scene at preselected intervals and for controlling the recording device;

said recording device recording latest ones of a plurality of frames of image signals picked up at the preselected intervals while sequentially updating the plurality of latest frames of image signals (Column 7, Lines 13-45);

said controller causing the recording device to hold frames of image signals picked up during a period of time based on a release operation, and causing non-selected frames image signals, existing in the recording device to be deleted (Yumoto et al. teaches capturing images in an ordinary shooting mode and a continuous shooting mode; in the continuous shooting mode images are captured and displayed in predetermined intervals; Column 17, Line 18 to Column 18, Line 45; Yumoto et al. also teaches an overwriting operation for cyclically storing image data, and further teaches that all the images stored in the areas G1 to G16 are respectively shifted by one area to adjacent areas and thereby the earliest image data in G1 is erased (non-selected frames of image signals are deleted), and the newest image data is written in the empty G1 (hold frames of image signals picked up during a period of time based on a release operation), Column 7, Lines 13-45).

Yumoto et al. fails to specifically disclose the controller causing non-selected frames of image signals, as distinguished from the one frame image signal selected, existing in said recording device to be automatically deleted, such that only the selected one frame of image signal is maintained. However, Taniguchi et al. teaches a still video camera, in which, all picture images recorded in the internal memory and an IC card are permitted to be erased (all frame

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erasing mode) and a protect switch S6 for protecting that one of picture images recorded in the internal memory card or an IC card which is desired to be maintained so that it may not be erased in error (Column 6, Lines 38-41, 59-62). When the protect switch S6 is at its ON position, the protecting is effective; after that a user slides the mode change-over switch S3 to ERASE-ALL mode, the CPU 30 causes all picture images recorded in the internal memory or an IC card are automatically erased except the one desired picture, which is maintained by protect switch S6. Noted that all the switches S3, S6 are connected to the CPU 30 (Figures 1-2, Column 6, Line 24-Column 7, Line 10; Column 8, Lines 13-23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Yumoto et al. by the teaching of Taniguchi et al. in order to obtain a still video camera having functions of erasing all frames except one desired frame is maintained. This allows the camera stores more desired frames in the memory.

Taniguchi et al. and Taniguchi et al. fail to specifically disclose wherein said controller sets a period of time corresponding to a photometric value as the preselected intervals. However, Yamagishi teaches that based on the result of photometry (photometric value) provided by the photometry circuit 36, the image pickup control circuit 40' determines a shutter speed or a time interval for keeping the shutter 12 open using the shutter drive circuit 30 so as to optimize an exposure value (figures 15A-15B, page 12, paragraph [0191]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Yumoto et al. and Taniguchi et al. by the teaching of Yamagishi in order to optimize an exposure value (page 12, paragraph [0191]).

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Regarding claim 21, Yumoto et al. discloses said controller comprises a mode setting circuit for allowing the operator to set a mode that causes said recording device to hold the frames of image signals picked up during the period of time at least before or after the release operation, whereby the frames of image signals are stored in the storage in accordance with said mode (Column 4, Line 50 to Column 6, Line 55).

Regarding claim 22, Yumoto et al. discloses when the operator sets a "Pre" mode for causing said recording device to hold the frames of image signals picked up before the release operation, said controller causes said recording device to hold the frames of image signals picked up at least before the release operation (Column 13, Line 64 to Column 14, Line 7).

Regarding claim 23, Yumoto et al. discloses when the operator sets a "Post" mode for causing said recording device to hold frames of image signals picked up after the release operation, said controller causes said recording device to hold the frames of image signals picked up at least after the release operation (Column 13, Line 64 to Column 14, Line 7).

Regarding claim 24, Yumoto et al. discloses when the operator sets a "Pre/post" mode for causing said recording device to hold the frames of image signals picked up before and after the release operation, said controller causes said recording device to hold the frames of image signals picked up before and after the release operation (Column 13, Line 64 to Column 14, Line 7).

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Regarding claim 25, Yumoto et al. discloses, in figure 1, a display (display section 40) for displaying pictures represented by frames of image signals recorded in said recording device, wherein said controller causes a picture represented by the one frame of image signal selected to be distinguished from the other pictures on said display (Column 4, Lines 33-40).

Regarding claim 26, Yumoto et al. discloses the controller causes said display to display the pictures together in a preselected format (Column 14, Lines 8-18).

Regarding claim 27, Yumoto et al. discloses a switch circuit for generating first information (capturing a sequence of images) and second information (retaining/displaying a desired image/images) in response to a first release operation (half pressed shutter button) and a second release operation (fully pressed shutter button), respectively, wherein said controller controls, in response to the first information, said image sensor and said recording device for executing pickup control at the preselected intervals and recording resulting frames of image signals in said recording device and then causes, in response to the second information and in accordance with the mode set by operator, said recording device to hold the frames of image signals existing therein (The examiner notes that when the shutter release button is in a half pressed state, a sequence of images are captured and stored in working memory 14 and when the shutter release button is in fully pressed state, a desired image/images are retained in memory 50, Column 4, Line 50 to Column 6, Line 55).



Regarding claim 28, Yumoto et al. discloses the switch circuit generates the first information when the operator presses a release button to a half-stroke position and then generates the second information when the operator presses the release button to a full-stroke position (Column 5, Line 49 to Column 6, Line 55).

Regarding claim 29, Yumoto et al. discloses the switch circuit comprises a sensor for generating the first information when the operator holds the apparatus in a position ready to shoot the scene (The examiner notes that when the shutter release button is in a half pressed state, a sequence of images is captured).

Regarding claim 30, Yumoto et al. discloses a signal generating circuit for generating timing signals at the preselected intervals under control of said controller, wherein said controller executes the pickup control over said image sensor and storage control over said recording device at the preselected intervals for thereby causing the frames of image signals picked at the intervals to be written to said recording device (The examiner notes that when the shutter release button is in a half pressed state, a sequence of images are captured and stored in working memory 14 and when the shutter release button is in fully pressed state, a desired image/images are retained in memory 50, Column 4, Line 50 to Column 6, Line 55).

***Allowable Subject Matter***

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7. Claims 38-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T. NGUYEN whose telephone number is (571) 272-7315. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID L. OMETZ can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



LN  
06/11/07

**LUONG T. NGUYEN  
PATENT EXAMINER**